1. (**Four Times Amended**) A method for inhibiting *in vivo* at least one of the proliferation and growth of lung cancer tissue, which lung cancer tissue expresses *hedgehog*, comprising administering an amount of an agent effective to decrease hedgehog expression in mesenchymal cells surrounding said cancer tissue, wherein said decrease in hedgehog expression in mesenchymal cells alters the proliferation or growth of the lung cancer tissue, and wherein the agent is selected from a *hedgehog* antibody or an *fgf-10* antagonist.

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2. (**Amended**) A method for inhibiting the growth of a lung tumor, which lung tumor expresses hedgehog, comprising administering an amount of an agent effective to decrease hedgehog expression in mesenchymal cells surrounding said cancer tissue, wherein said decrease in hedgehog expression in mesenchymal calls inhibits the growth of the lung tumor, and wherein the agent is selected from a *hedgehog* antibody or an *fgf-10* antagonist.

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4. (**Reiterated**) The method of claim 1, wherein the cell is treated in an animal and the agent is administered to the animal as a therapeutic composition.

5. (**Amended**) The method of claim 1 or 2, wherein the agent is a *hedgehog* antibody.

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22. (**Amended**) The method of claim 1 or 2, wherein the *fgf-10* antagonist is a small organic molecule.

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24. (**Amended**) The method of claim 5, further comprising preparing a formulation including an identified *hedgehog* antibody and a pharmaceutically acceptable excipient.

25. (**Amended**) The method of claim 5, wherein the *hedgehog* antibody binds to *hedgehog* and blocks *hedgehog* signal transduction.

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26. (**Amended**) The method of claim 5, wherein the binding of the *hedgehog* antibody prevents the upregulation of *patched* and/or *gli* expression.

27. (**Amended**) The method of claim 5, wherein the *hedgehog* antibody decreases *hedgehog* signal transduction by altering the localization, protein-protein binding and/or enzymatic activity of an intracellular protein involved in a *hedgehog* signal transduction pathway.

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28. (**Amended**) The method of claim 5, wherein the *hedgehog* antibody alters the level of expression of a *hedgehog* protein, a *patched* protein or a protein involved in a *hedgehog* signal transduction pathway.

34. (**Amended**) A method for inhibiting at least one of the proliferation and growth of lung cancer cells which express *hedgehog*, comprising contacting the cells with an amount of a *fgf-10* antagonist effective to alter the proliferation or growth of the lung cancer cells, wherein the *hedgehog* antagonist is a small organic molecule.

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35. (**Amended**) The method of claim 34, further comprising preparing a formulation including an identified *fgf-10* antagonist and a pharmaceutically acceptable excipient.

*The amended claims are restated below to reflect changes from the last filing.*

1. (**Four Times Amended**) A method for inhibiting *in vivo* at least one of the proliferation and growth of lung cancer tissue, ~~cells~~ which lung cancer tissue expresses ~~express~~ *hedgehog*, comprising administering ~~contacting the cells with~~ an amount of an agent effective to decrease hedgehog expression in mesenchymal cells surrounding said cancer tissue, wherein said decrease in hedgehog expression in mesenchymal cells alters ~~alter~~ the proliferation or growth of the lung cancer tissue ~~cells~~, and wherein the agent is selected from a *hedgehog* ~~antagonist, a *ptc* agonist, and~~ antibody or an *fgf-10* antagonist.

2. (**Amended**) A method for inhibiting the growth of a lung tumor, which lung tumor expresses hedgehog, comprising administering ~~contacting the lung tumor with~~ an amount of an agent effective to decrease hedgehog expression in mesenchymal cells surrounding said cancer tissue, wherein said decrease in hedgehog expression in mesenchymal calls inhibits ~~inhibit~~ the

growth of the lung tumor, and wherein the agent is selected from a *hedgehog* ~~a antagonist, a *ptc* agonist, and~~ antibody or an *fgf-10* antagonist.

5. (**Amended**) The method of claim 1 or 2, wherein the agent is a *hedgehog* antibody ~~antagonist~~.

22. (**Amended**) The method of claim 1 or 2, wherein the ~~*hedgehog* antagonist, *patched* agonist, or~~ *fgf-10* antagonist is a small organic molecule.

24. (**Amended**) The method of claim 5, further comprising preparing a formulation including an identified *hedgehog* antibody ~~antagonist~~ and a pharmaceutically acceptable excipient.

25. (**Amended**) The method of claim 5, wherein the *hedgehog* antibody ~~antagonist~~ binds to *hedgehog* and blocks *hedgehog* signal transduction.

26. (**Amended**) The method of claim 5, wherein the binding of the *hedgehog* antibody ~~antagonist~~ prevents the upregulation of *patched* and/or *gli* expression.

27. (**Amended**) The method of claim 5, wherein the *hedgehog* antibody ~~antagonist~~ decreases *hedgehog* signal transduction by altering the localization, protein-protein binding and/or enzymatic activity of an intracellular protein involved in a *hedgehog* signal transduction pathway.

28. (**Amended**) The method of claim 5, wherein the *hedgehog* antibody ~~antagonist~~ alters the level of expression of a *hedgehog* protein, a *patched* protein or a protein involved in a *hedgehog* signal transduction pathway.

34. (**Amended**) A method for inhibiting at least one of the proliferation and growth of lung cancer cells which express *hedgehog*, comprising contacting the cells with an amount of a ~~*hedgehog*~~ *fgf-10* antagonist effective to alter the proliferation or growth of the lung cancer cells, wherein the *hedgehog* antagonist is a small organic molecule.